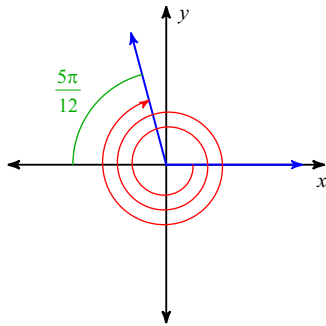


4.1 Review 1

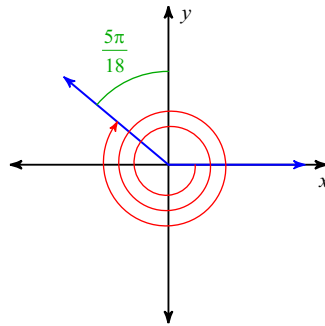
Date _____ Period _____

Find the measure of each angle.

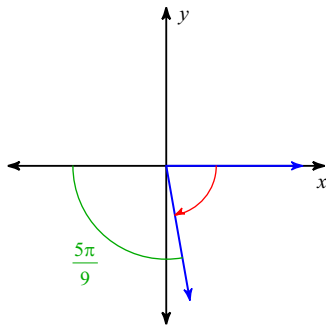
1)



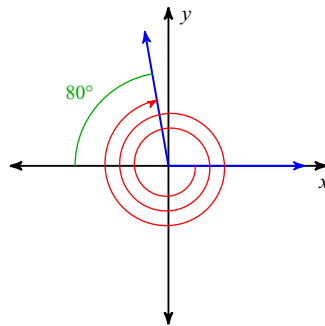
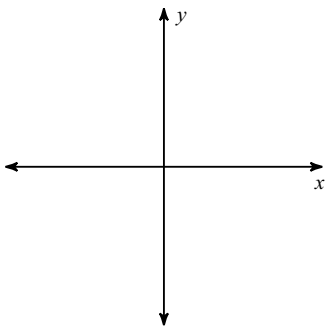
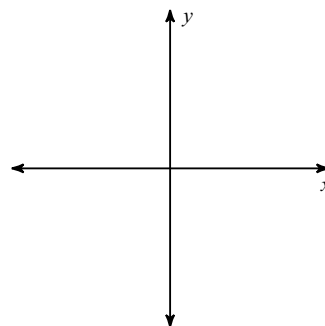
2)



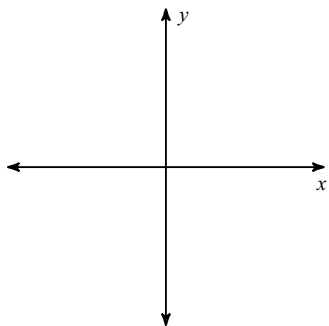
3)



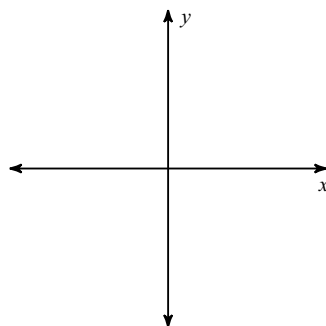
4)

**Draw an angle with the given measure in standard position.**5) 710° 6) $\frac{7\pi}{6}$ 

7) $\frac{37\pi}{12}$

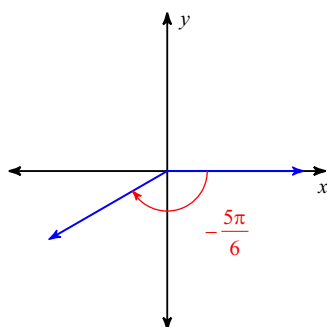


8) 510°

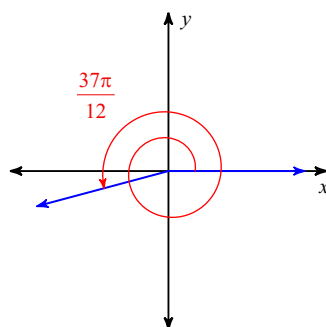


Find the reference angle.

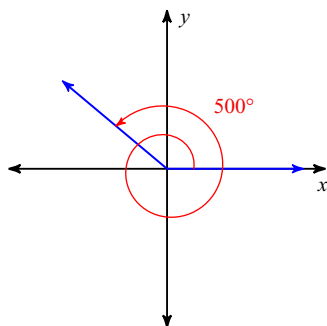
9)



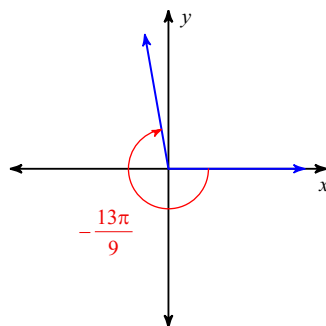
10)



11)



12)



Convert each degree measure into radians.

13) -940°

14) 660°

15) -120°

16) -420°

Convert each radian measure into degrees.

17) $\frac{\pi}{6}$

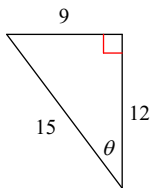
18) $\frac{61\pi}{18}$

19) $\frac{5\pi}{6}$

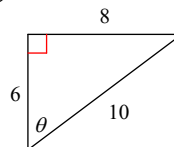
20) $-\frac{11\pi}{2}$

Find the value of the trig function indicated.

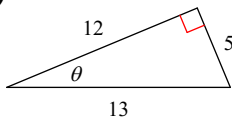
21) $\cos \theta$



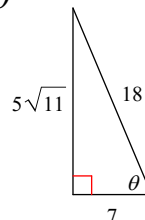
22) $\cot \theta$



23) $\cos \theta$



24) $\cos \theta$



Find the exact value of each trigonometric function.

25) $\tan 225^\circ$

26) $\tan 30^\circ$

27) $\cos 330^\circ$

28) $\cos \frac{11\pi}{6}$

29) $\cos \frac{3\pi}{4}$

30) $\sin 315^\circ$

31) $\sec -120^\circ$

32) $\cot 270^\circ$

33) $\sec -135^\circ$

34) $\csc 0^\circ$

Find the exact values of the five trigonometric ratios not given.

35) $\sin \theta = -\frac{3}{5}$ and $\cos \theta < 0$

36) $\cos \theta = -\frac{\sqrt{2}}{2}$ and $\sin \theta > 0$

37) $\tan \theta = -\frac{\sqrt{7}}{3}$ and $\sin \theta > 0$

38) $\tan \theta = 1$ and $\cos \theta > 0$

39) $\sec \theta = -\frac{13}{12}$ and $\sin \theta < 0$

40) $\csc \theta = \sqrt{2}$ and $\cos \theta > 0$

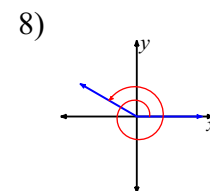
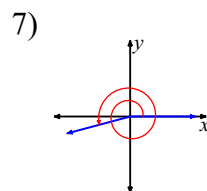
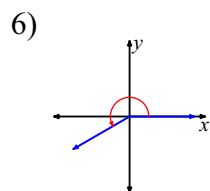
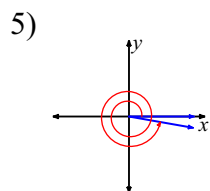
Answers to 4.1 Review 1 (ID: 1)

1) $-\frac{65\pi}{12}$

2) $-\frac{47\pi}{9}$

3) $-\frac{4\pi}{9}$

4) -980°



9) $\frac{\pi}{6}$

10) $\frac{\pi}{12}$

11) 40°

12) $\frac{4\pi}{9}$

13) $-\frac{47\pi}{9}$

14) $\frac{11\pi}{3}$

15) $-\frac{2\pi}{3}$

16) $-\frac{7\pi}{3}$

17) 30°

18) 610°

19) 150°

20) -990°

21) $\frac{4}{5}$

22) $\frac{3}{4}$

23) $\frac{12}{13}$

24) $\frac{7}{18}$

25) 1

26) $\frac{\sqrt{3}}{3}$

27) $\frac{\sqrt{3}}{2}$

28) $\frac{\sqrt{3}}{2}$

29) $-\frac{\sqrt{2}}{2}$

30) $-\frac{\sqrt{2}}{2}$

31) -2

32) 0

33) $-\sqrt{2}$

34) Undefined

35) $\cos \theta = -\frac{4}{5}, \tan \theta = \frac{3}{4}$

$\csc \theta = -\frac{5}{3}, \sec \theta = -\frac{5}{4}, \cot \theta = \frac{4}{3}$

36) $\sin \theta = \frac{\sqrt{2}}{2}, \tan \theta = -1$

$\csc \theta = \sqrt{2}, \sec \theta = -\sqrt{2}, \cot \theta = -1$

37) $\sin \theta = \frac{\sqrt{7}}{4}, \cos \theta = -\frac{3}{4}$

$\csc \theta = \frac{4\sqrt{7}}{7}, \sec \theta = -\frac{4}{3}, \cot \theta = -\frac{3\sqrt{7}}{7}$

38) $\sin \theta = \frac{\sqrt{2}}{2}, \cos \theta = \frac{\sqrt{2}}{2}$

$\csc \theta = \sqrt{2}, \sec \theta = \sqrt{2}, \cot \theta = 1$

39) $\sin \theta = -\frac{5}{13}, \cos \theta = -\frac{12}{13}, \tan \theta = \frac{5}{12}$

$\csc \theta = -\frac{13}{5}, \cot \theta = \frac{12}{5}$

40) $\sin \theta = \frac{\sqrt{2}}{2}, \cos \theta = \frac{\sqrt{2}}{2}, \tan \theta = 1$

$\sec \theta = \sqrt{2}, \cot \theta = 1$